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ABSTRACT

While the majority of Title I funding should continue to support essential professional and paraprofessional staff in high-poverty schools, both existing and new Title I funds should increasingly support schools in adopting effective instructional programs and improving professional development. Children in Title I schools need 6 hours or more of high-quality instruction every day, not 40 minutes of remediation. It is time that Title I became the engine of reform in high-poverty schools, helping them adopt programs based on the best research, development, and dissemination practices. Title I can become an effective way to achieve funding for schoolwide change. Staff can choose from proven and replicable programs. Comprehensive or whole-school reform may be preferred. Or more focused programs targeting reading, math, early childhood, tutoring, classroom management, study skills, parent involvement, or school-to-work may be selected. Title I has become more flexible. Currently schools with at least 50 percent of its students qualifying for free or reduced prices lunches can become schoolwide projects with schools selecting the program to be used. Title I could also help by funding further evaluation on the effectiveness of current and new, but promising, programs. This report includes a review of programs for whole-school change, including the evidence of their effectiveness. (Contains 47 references.) (RKJ)

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How Title I Can Become the Engine of Reform in America's Schools

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How Title I Can Become the Engine of Reform in America's Schools

Abstract

Title I, the largest federal investment in elementary and secondary schools, is in need of a major overhaul to increase its impact on the achievement of the millions of children it serves. This paper proposes changes in Title I intended primarily to enable teachers to implement high-quality, research-based programs and practices with all children in schools serving many children placed at risk. These proposed changes are as follows.

1. Greatly expand access to proven programs.

Staffs of Title I schools should have access to an array of proven, replicable programs, both comprehensive, whole-school reform designs as well as more focused programs (e.g., programs for reading or math, early childhood, tutoring, classroom management, study skills, parent involvement, or school-to-work). The Comprehensive School Reform Demonstration (CSRD), introduced in 1997 by Congressmen David Obey and John Porter, is one model of how to do this; it provides grants of at least $50,000 for up to three years to schools that adopt proven comprehensive designs. Over time, as R&D evaluates existing programs and develops new ones, and as reform organizations build capacity to serve more schools, proven designs should be available to all Title I schools. As the availability and research base of proven programs increases, Title I schools should increasingly be encouraged to adopt these programs, especially if they are not achieving good results with their existing approaches.

2. Invest in research and development to develop and evaluate replicable programs, and build design team capacity.

If Title I schools are to be encouraged to adopt effective programs, the number of programs, their capacity to work with large numbers of schools, and most importantly, the research base behind each must be substantially improved. Investments are needed in design competitions to accelerate the development of promising models, and to fund third-party evaluations of existing and new programs. Adding an amount set at 3% of Title I funds for R&D of this kind could produce an array of proven, replicable models within 3-5 years. In addition, not-for-profit reform organizations need assistance to scale up their capacity to serve large numbers of schools with quality and integrity.

3. Increase investment in high-quality professional development.

Professional development is central to the adoption of comprehensive reform designs, of course, but there is a need to increase high-quality professional development for other purposes as well. For example, teachers may need professional development to build their subject matter knowledge, classroom management skills, multicultural awareness, or ability to work with English language learners.

4. Expand eligibility for schoolwide projects.

The easing of requirements for schoolwide status set in motion in the previous two Title I reauthorizations should be continued, perhaps by enabling all schools below 50% free lunch to apply for schoolwide status if they have a plausible schoolwide reform plan. As

Title I transitions toward an emphasis on professional development and whole-school change, targeted assistance (non-schoolwide) status should fade away.

5. Improve assessment and accountability procedures.

Assessment/accountability procedures should be refined to reward schools making gains toward demanding standards, assist schools that are not making adequate gains, and restructure schools that are low and declining.

For more than 30 years, Title I has been by far the federal government's largest investment in elementary and secondary education for children in impoverished communities. At about $8 billion per year, it serves approximately 10.5 million children in 50,000 schools (U.S. Department of Education, 1998). A key reason for the popularity of Title I has been its broad reach; 95% of school districts receive Title I funds (U.S. Department of Education, 1993a). Yet this support is eroding. In 1997, the U.S. Senate passed (by a single vote) a bill making Title I into block grants to states with few restrictions on its use. This bill did not prevail, but sentiment in favor of block grants remains strong among a significant minority in Congress. In contrast to its rapid growth during the 1980's and early 90's, funding for Title I has been more or less stagnant in recent years, during good economic times. An economic downturn or other changes could seriously threaten the existence of Title I.

Perhaps the most important reason for the peril faced by Title I is a growing perception that Title I does not have as much of an impact on student achievement as was previously thought. This perception is based primarily on the disappointing results of an evaluation of Chapter 1, Title I's predecessor (until 1994). *Prospects* (Puma, Karweit, Price, Ricciuti, Thompson, & Vaden-Kiernan, 1997), a four-year longitudinal study, compared Chapter 1 and non-Chapter 1 students, controlling for background factors. It reported essentially no effect of Chapter 1 participation on student achievement. Later analyses of *Prospects* data have found positive effects for certain subgroups of students, especially those with less severe learning problems (Borman, D'Agostino, Wong, & Hedges, 1998), and Chapter 1 was a likely factor in the significant reduction in minority-white achievement gaps in the 1970's and '80's. Other recent studies have found more promising effects than did *Prospects* (Borman & D'Agostino, 1996), as did the Sustaining Effects study of the 1970's (Carter, 1984). However, even if these more optimistic assessments are right and Puma et al. are wrong, there is no doubt that the

effects of Chapter 1 were modest. It is unlikely that effects for the current Title I program are markedly better, as school and classroom practices under Title I are not, in most cases, significantly different from those under Chapter 1 (Citizen's Commission on Civil Rights, 1998).

Whatever the average effects of Title I resources may be, Title I is the crucial resource for reform of the education of students in high-poverty schools. Whenever an inner-city or poor rural school is found to be achieving outstanding results with its students by implementing innovative strategies, these innovations are almost invariably paid for primarily by Title I funds. Experience with the difficulties of implementing school-level reforms in high-poverty schools in countries lacking funding sources similar to Title I shows how central this resource is in creating the potential for major improvements in school practices and student outcomes; the relatively high performance of American elementary students on international comparisons of reading and math may reflect the focus of Title I on exactly these subjects and grade levels.

For political reasons and, more importantly, to improve its outcomes for children, it is essential to re-energize and refocus Title I. The 1999 reauthorization provides a timely opportunity to reconceptualize Title I, to focus it more directly on helping improve teachers' practices and, therefore, student achievement. The purpose of this paper is to outline a means of making Title I an engine of school-by-school reform by using both its resources and its influence to promote the use of effective programs and materials in schools serving many children placed at risk.

Improving the Achievement Outcomes of Title I Programs

The task to be accomplished is simple to state, but difficult to achieve. It is to dramatically improve the educational outcomes of children receiving Title I services. The difficulty, of course, is in the juxtaposition of two immutable facts. First, student achievement

outcomes cannot change unless teachers and other educators who work with Title I children begin to use markedly more effective instructional strategies and materials. Second, the number of schools, teachers, and students involved in Title I is so vast that changing teachers' practices, one classroom at a time, is a gargantuan task. Title I currently employs approximately 189,000 teachers, reading specialists, paraprofessionals, nurses, counselors, social workers, parent liaisons, and other educators, located in more than 50,000 schools in more than 13,000 school districts in every state. Yet it is not only Title I teachers who must use much more effective practices if Title I children are to achieve at significantly higher levels. Every teacher in a Title I school must embrace more effective strategies and materials. This means that we need to reach about 1.5 million regular classroom teachers, in addition to the 189,000 educators paid directly by Title I funds. Just to do a one-day workshop in every Title I school would take about 250 person-years. Yet far more than a one-day workshop is needed to substantially improve the daily teaching practices of an entire school staff.

Recognizing the difficulties inherent in large scale school-by-school change, most proposals for Title I reform have focused instead on changes in regulations, formulas, and tougher standards and accountability mechanisms. In particular, reforms introduced in the 1988 and 1994 reauthorizations moved Title I in the direction of greater flexibility. The most important reform has been provisions allowing high-poverty schools to become "schoolwide projects," in which all students in the school can benefit from Title I dollars. Currently, schools in which at least 50% of students qualify for free or reduced price lunches can become schoolwide projects, and approximately 15,000 schools (of 20,000 that are estimated to qualify) have chosen this option. Other reforms in 1988 and 1994 focused on standards and accountability; in particular, the 1994 reauthorization required districts to hold Title I children to the same standards as other children, and required states and districts to adopt challenging

content and performance standards. Unlike the schoolwide provisions, these elements of the reauthorization have been only inconsistently implemented (Citizen's Commission on Civil Rights, 1998), but the standards and accountability movement of the past decade has created conditions in which the vast majority of Title I schools operate under state or district policies in which there are content and performance standards, and in which there are negative sanctions for low or falling scores on assessments ranging from embarrassment to school takeovers or reconstitution (and positive consequences for high or rising scores ranging from recognition to cash awards).

A Vision of Title I: 2004

The changes in Title I introduced in 1994 created the potential for Title I schools to use more effective strategies, and increased their motivation to do so. Thousands of schools have used the new flexibility in Title I to adopt or develop more innovative approaches. However, the great majority of Title I schools are not different in fundamental ways from Chapter 1 schools. Their students are capable of achieving at much higher levels than they do today, but this will not change until teachers in Title I schools are using more effective methods and materials every day.

The problem is that schools are typically given little guidance in writing their Title I plans. The safest thing for a principal or school planning committee to do in a Title I plan is to propose what the school proposed last year, or what Title I/Chapter 1 has always supported: pullout teachers and classroom aides. New accountability pressures (or an honest perception that too many children are failing) may motivate principals to try other configurations or programs, but the path of least resistance is to support the salaries and roles of existing staff. To do otherwise risks turmoil, hard feelings, and uncertainty.

It is time to radically change Title I. Much as Title I is a popular program, because it goes to so many school districts, it cannot continue to survive year after year without producing better outcomes for children. Millions of our most impoverished children depend on Title I, which provides the best chance they have that their teachers will have access to the best in curriculum and instruction. We can do much better.

As a starting point for a discussion of how Title I must change, consider a vision of what Title I might look like five years from now, in the year 2004, if we make the right choices in the upcoming 1999 reauthorization.

In this vision, principals, working with representatives of teachers and parents, would propose Title I plans to their districts and states, much as they do today. However, each school staff would not be expected to reinvent the wheel. Instead, school staffs would select programs from a list of proven, replicable models. These would include whole-school change models, incorporating curriculum, instructional methods, assessments, services for at-risk children, family support programs, professional development, and other features. Alternatively, schools could select programs in specific subject areas or for specific purposes (e.g., tutoring for poor readers, classroom management, or parent involvement), and then assemble these into their own comprehensive plans. They might choose proven, effective after-school or summer school programs.

Each of the programs on the proven list would have to have been evaluated against rigorous standards of evidence by third-party, neutral evaluators. They would have been compared to matched control schools on achievement measures linked to national standards, plus other measures, if appropriate. Schools would have available the results of these assessments, and would use them along with other factors, such as cost, appropriateness to their unique needs, and availability, to make a rational, considered choice. No program is effective in every

circumstance, and every program depends for its effectiveness on the quality of implementation provided by the school itself. Yet school staffs could have confidence that if they adopted a given method and implemented it with fidelity, intelligence, and enthusiasm, they would be likely to produce at least the results obtained in the third-party evaluations.

The entire school staff, plus parent representatives, would be involved in the selection of innovative programs. In fact, staffs might be required to vote by secret ballot to adopt a given model, with a requirement of a supermajority of, say, 80% in favor. Effective implementation of any innovation is unlikely if the professionals implementing it had no part in choosing it.

Schools would not be *required* to select a program from an approved list; they would be able to propose an alternative if they could provide adequate, research-based justification. They might, for example, propose to use programs that are in the process of being evaluated, or to develop their own comprehensive approaches. However, this would require careful thought and planning. In contrast to the situation today, the path of least resistance would be to select a proven model, not to simply hire pullout teachers and aides or to propose a poorly planned, home-grown model.

Over time, the list of proven programs would grow and continually improve. Substantial federal funding would support a nationwide enterprise of development, evaluation, and dissemination of programs designed to address every subject, every age level, and every need of Title I elementary and secondary schools. Programs found to be effective by their developers would be evaluated by third-party evaluators and, if successful, added to lists of proven programs.

Title I offices or other agencies in states, large districts, or intermediate units would build a capacity to help school staffs make rational and informed choices among proven models. They would maintain libraries of video tapes, print materials, curriculum samples, and evaluation

reports to help school staffs in their decision making process. They would develop electronic means of disseminating information and answering questions, from the internet to video conferencing, as well as building staff capacity to help schools assess their own needs and resources and match them with appropriate programs. They would also build a capacity to help coordinate the activities of external providers of professional development services, to ensure that these providers are following through on their commitments, and to help schools and trainers assess and continually improve the quality of implementation of each design.

The Title I of the future would be somewhat like the medical innovation system today. Just as physicians are constantly upgrading their practices in light of new evidence and adopting new medications, devices, and procedures approved by the Food and Drug Administration, so would educators of the future be constantly upgrading their instructional practices, curricula, and services in light of new knowledge, especially program evaluations by neutral and skilled evaluation agencies.

Achieving the Vision

What would it take to make this vision a reality? First, it would take a substantial, long-term federal investment to greatly expand the "shelf" of effective and replicable approaches. This would mean funding evaluation agencies to carry out rigorous evaluations of existing promising programs, funding development of new models capable of being widely used in Title I schools, and experimenting with innovative methods for professional development, quality control, network building, and brokering new school designs into Title I schools (see Slavin, 1997). It would mean building the capacity of current and future training networks to work with large numbers of schools without sacrificing quality and integrity. A sufficient program of development and evaluation could cost as much as three percent of Title I, added to current

funding levels. This would be a huge amount ($240 million per year) in comparison to current R&D expenditures, but a tiny amount in comparison to the total spent on Title I and on state compensatory education services (and tiny contrasted with federal support for R&D in such areas as medicine or agriculture). Another 3% might be allocated to helping not-for-profit reform networks build up their capacity to serve large numbers of schools.

Of course, today there are many replicable programs already working in hundreds of Title I schools that do have evidence of effectiveness. A companion study to the *Prospects* Chapter 1 evaluation, called *Special Strategies*, investigated promising alternatives to traditional Chapter 1 approaches (Stringfield et al, 1997). Two schoolwide models, our own Success for All program and James Comer's School Development Program, produced outstanding gains when well-implemented. The whole-school designs funded by the New American Schools Development Corporation have promising initial evidence of effectiveness, as do a few additional whole-school designs (Herman, 1999; Northwest Regional Educational Laboratory, 1998; Education Commission of the States, 1998; Slavin & Fashola, 1998). Many proven subject-specific approaches, tutoring models, after-school programs, bilingual/ESL programs, and other elements can be readily assembled into schoolwide approaches. Yet there is still a need for a great deal more independent evidence on replicable programs, and for more programs to meet the full range of needs in Title I elementary and secondary schools.

As the list of proven and promising programs grows, Title I schools would increasingly be encouraged to consider these models as alternatives to their current practices. A special fund would be set aside to help schools with one-time start-up costs associated with adopting particular reform models, as is currently done in the Comprehensive School Reform Demonstration (CSRD) funded by Congress in 1997 (described below). However, adoption of proven programs could only be encouraged, not mandated, as the national training capacity of all

existing reform networks grows to be able to serve larger numbers of Title I schools. As the number of proven models increases, and as the evidence of effectiveness for these models becomes stronger and more widely known, Title I services should increasingly focus on these programs.

Comprehensive School Reform

The centerpiece of Title I reform should be the widespread adoption by Title I schools, especially schoolwide projects, of proven, comprehensive reform models. These are programs affecting all aspects of school functioning: instruction, curriculum, school organization, provision of supplementary services, family support, professional development, and so on. Schools should be encouraged to select from among models with strong evidence of effectiveness; in general, this means that the achievement of students who participated in the program has been compared to that of students in matched control schools.

The advantages of emphasizing proven, comprehensive programs are many. The most important is that, in choosing a program with evidence of effectiveness in schools like theirs, school staffs can have confidence that if they implement the program as designed, they are likely to see the same kinds of gains produced in the evaluations. When well implemented, comprehensive programs unite school staffs around common goals, giving them a consistent, well-integrated approach to most aspects of school functioning. Because all national reform organizations create networks of participating schools, schools entering these networks are likely to interact with experienced schools within and beyond their own districts who can help mentor them toward effective implementation. Schools can create their own comprehensive designs by adopting equally well-evaluated approaches in each curriculum area, plus proven approaches to school organization, family support, and other features, but adopting a comprehensive design

that includes all of these elements is easier to implement and more likely to coordinate all of these elements around a consistent vision and plan of operation.

In recent years, a number of developments have created new opportunities for the widespread adoption of comprehensive reform programs. First, starting in the 1980's, a small number of programs of this kind began to be developed and disseminated. Four of these developed particularly large national networks in the 1990's: James Comer's School Development Program (Comer et al., 1996), now in about 600 schools; Theodore Sizer's (1992) Coalition of Essential Schools, now in working with about 1000 mostly secondary schools; Henry Levin's (1987) Accelerated Schools, also in about 1000 schools; and our own Success for All (Slavin, Madden, Dolan, & Wasik, 1996), now in more than 1500 elementary schools. Other programs, such as Direct Instruction (Adams & Englemann, 1996), High Schools that Work (Bottoms et al., 1992), and Different Ways of Knowing (Catterall, 1995), have also built up sizeable networks of schools, training capacity, and research bases. These programs are quite different from each other, but all have created national networks of schools using the programs and substantial capacity for working with schools. Whatever their other strengths and weaknesses may be, these programs have convincingly demonstrated that external organizations can introduce ambitious school change models on a very large scale.

Starting in 1991, another key player came onto the scene. This was the New American Schools Development Corporation (NASDC), a non-profit foundation funded primarily by large corporations to develop "break the mold" school designs. NASDC began with eleven programs, and ultimately stayed with the eight most successful for a five-year funding period. Two of these were based on existing designs, Atlas (Comer, Gardner, Sizer, & Whitla, 1996), a partnership between Comer, Sizer, and Howard Gardner, and our own Roots & Wings design, which added math, science, and social studies program to the existing Success for All reading/writing model

(Slavin, Madden, & Wasik, 1996; Slavin & Madden, 1999). The others are Co-NECT, Expeditionary Learning, Purpose-Centered Education (formerly Audrey Cohen), America's Choice (formerly National Alliance), Modern Red Schoolhouse, and Urban Learning Centers (see Stringfield, Ross, & Smith, 1996, for descriptions of each). The New American Schools designs greatly expanded the choices of comprehensive models available to schools, and developed means of introducing models to schools and helping large districts develop strategies to support adoption, scale-up, and quality implementations within their districts (see Bodilly, 1998).

Obey-Porter Comprehensive School Reform Demonstration

The most important development in whole-school reform in recent years has been the creation in 1997 of the Comprehensive School Reform Demonstration (CSRD), introduced by Congressmen David Obey (D-Wisconsin) and John Porter (R-Illinois). CSRD provides $150 million per year, most of which is awarded to schools to help them with the start-up costs of adopting proven, comprehensive design. Schools can apply to their states for grants of at least $50,000 per year for up to three years. As of this writing, the grants process is under way.

In the CSRD legislation, 17 programs were named as examples of comprehensive designs. These included all eight NASDC programs, Success for All, Accelerated Schools, the School Development Program, the Coalition of Essential Schools, Direct Instruction, and several less-widely disseminated programs. Schools are not limited to these, and in early states a wide variety of programs have been funded; only about half (53%) of early grants have been to implement programs on the list of seventeen. Of the first 1173 grants made by 40 states, 16% have gone to Success for All/Roots & Wings, seven percent to Accelerated Schools, five percent to Direct Instruction, three percent to Core Knowledge, High Schools That Work, and

America's Choice, and eight percent to the six NASDC designs other than Roots & Wings or America's Choice. Grants are averaging approximately $66,000 per year.

CSRD is providing an enormous boost to the comprehensive school reform movement, which was already expanding rapidly before CSRD. The most obvious impact is on schools that receive CSRD grants, approximately 2,200 schools in 1998-99. However, the impact will certainly be much broader than this. First, the entire awareness process being carried out by states in collaboration with regional laboratories is certain to make a far larger set of schools aware of comprehensive programs. Even those schools that never apply for CSRD or those that apply but are not funded will now be aware that comprehensive programs exist and that they are valid, approved expenditures of Title I funds. State departments of education, and especially their Title I offices (which are mostly running the CSRD competitions) will now have staff who are deeply aware of comprehensive school reform models, and may suggest them to Title I schoolwide projects entirely separate from the CSRD process. Similarly, the regional laboratories are playing a key role in the awareness and buy-in process for CSRD, and are learning about comprehensive reform models and how to disseminate them in the process.

Evidence of Effectiveness

Although the CSRD process is just now getting under way, there are early indicators that this strategy could make a substantial and widespread difference in student achievement. Of course, the first indicator is the evidence of effectiveness for the comprehensive models themselves (see Herman, 1999; Northwest Regional Educational Laboratory, 1998; Slavin & Fashola, 1998). Further, an independent evaluation of schools implementing a variety of reform models (mostly NASDC programs) in Memphis found that students in these schools were

performing substantially better than were students in matched control schools (Ross, Sanders, Wright, & Stringfield, 1998).

Requirements for Effective Implementation of Comprehensive Reforms

Clearly, Title I could become substantially more effective for children placed at risk if Title I schools adopted proven, comprehensive reform designs and implemented them with fidelity, intelligence, and adaptation to local circumstances. This is almost a tautology; obviously, Title I will be more effective if all Title I schools use more effective methods and materials. The question is how to bring about this state of affairs within a reasonable time period and with resources not substantially more than those spent on Title I now. Following are some general considerations about how this could be done.

1. *Greatly Expand the Number, Quality, Evidence Base and Capacity of Proven and Promising Programs.* The most important missing ingredient in any plan for Title I reform based on widespread adoption of proven programs is a shortage of rigorously evaluated programs capable of working with hundreds or thousands of schools. The Education Commission of the States (1998) surveyed twenty-four reform designs, including all of those mentioned in the Obey-Porter legislation, on their 1997-98 numbers and capacity to serve additional schools in 1999-2000. Even making some very liberal assumptions, the total capacity for 1999 is less than 3,000 additional schools; a more realistic estimate would be 2,000 additional schools, of which about two-thirds could be concentrated among six designs: Success for All/Roots & Wings, Accelerated Schools, School Development Program, America's Choice, Core Knowledge, and High Schools That Work. Of course, 2,000 to 3,000 schools is a lot of schools, but it is a small fraction of the 50,000 Title I or even the 20,000 schools

eligible for schoolwide status. Clearly, there is a need for investment both in expanding the capacity of existing designs and in developing and disseminating new ones. In 1998, Congress approved funding for both of these purposes. It allocated $15 million to help design teams scale up their operations, to engage regional laboratories in support of scale-up, and to help build technology capacity to serve isolated rural schools. Twelve million dollars were approved to set up design competitions to create and evaluate new programs, especially for middle and high schools. These initiatives are a step in the right direction, but much more needs to be done to build up a strong set of replicable models capable of working on a large scale. (See discussion of R&D, below.)

Of course, increasing the numbers of schools served or design teams' capacity to serve large numbers of schools makes no sense unless the quality and effectiveness of each program is maintained at each level of scale-up. Some process will be necessary to ensure that programs shown to be effective at a smaller scale are being implemented with integrity and continued effectiveness as the programs expand (see Slavin, 1997).

Much as the issue of capacity needs to be taken seriously, however, limited capacity today in no way implies that comprehensive reform models cannot serve very large numbers of schools without compromising on quality or integrity within a few years. Our own Success for All/Roots & Wings program has expanded by about 60% per year over a ten-year period. It is possible to anticipate that with support from government, foundations, and (in the case of the few for-profits) investors, both the number and capacity of replicable reform designs could grow to very large numbers within a few years. Extrapolating forward from 1999, a continuing growth

rate as low as 30% would create a combined capacity among existing models to serve every Title I school in the U.S. by 2004-2005, when the next Title I reauthorization will take place.

2. *Carry Out Rigorous Evaluations of Comprehensive Reform Models.* Another major limitation of the current set of programs available to schools is the shortage of high-quality research done to evaluate their effects on student achievement (see Herman, 1999; Slavin & Fashola, 1998). Only a few of the programs have been compared to matched control groups; fewer still have had replicated evaluations; very few have been evaluated by independent third parties. At present, the practical definition of "proven" accepted by states in approving CSRD applications is very loose. Most of the seventeen programs listed in the Obey-Porter legislation only present anecdotal evidence, which means that they can give examples of individual schools that have improved in achievement, but have not been evaluated in formal experimental-control comparisons. Over time, rigorous evaluations must be done and standards for designation as "proven" must increase. A good starting place in the definition of standards of research adequacy and effectiveness is the review of research on comprehensive programs recently released by American Institutes for Research (Herman, 1999).

3. *Adoption of Particular Programs Must Be Voluntary.* It would be a terrible mistake for enthusiasm over proven, comprehensive reform designs to lead districts, states, or federal agencies to require adoption of particular programs or, in most cases, of any program at all. Teachers are professionals, and must have a choice in decisions as profound as the selection of a comprehensive reform model. Our Success for All/Roots & Wings model and most other New American Schools designs require a

vote by secret ballot of at least 80% of school staff. Some mechanism like this is essential to ensure that teachers and other educators put their hearts and minds behind effective implementation of a given program.

4. *Start-up Grants Are Needed.* All comprehensive reform models have higher costs in their early years than in later years. These one-time costs are for training, materials, released time, and so on. A school's ordinary Title I funding, plus other readily available resources likely to continue over time, should be enough to cover long-term costs of implementing a given reform, but national or state Title I funds should be reserved to provide to schools in the early stages of adopting comprehensive designs. The model for this is the Comprehensive School Reform Demonstration, which, as noted earlier, is making grants of at least $50,000 per school per year for up to three years. In addition to helping schools with start-up costs, grants of this kind provide a powerful incentive for schools to adopt proven programs and to come forward with their own resources to pay for costs not covered by start-up grants.

5. *The Shift to Comprehensive Reform Should Be Gradual.* It should go without saying that moving from the current situation to one in which very large numbers of Title I schools are selecting from among proven models needs to take place gradually, moving from success to success rather than risking failure by mandating programs or expanding faster than organizations developing comprehensive programs can build capacity without compromising on quality. This means that for many years, schools must be able to continue programs like the ones common in Title I schools today, and there must always be opportunities for schools to create and implement programs of their own design if they can show evidence that they are working.

6. *Quality of Implementation Must Be a Key Concern.* A comprehensive reform model is not like a pill schools can take to cure what ails them; it is only a tool that the school must use effectively and intelligently. Program developers must develop implementation benchmarks or standards, help assess schools' progress in achieving quality implementation, and share this information with the schools and their districts, as a means of ensuring that implementation quality of their program is high and improving. Research on what constitutes quality implementation of a given program and how districts can monitor and support high-quality implementation will be essential in informing this process.

Research and Development

A key assumption in moving Title I toward an emphasis on implementation of proven programs is that there is a knowledge base for effective practice, and in particular that there are mechanisms for the development, formative evaluation, third-party evaluation, and dissemination of replicable programs capable of significantly enhancing student success in Title I schools. Yet this mechanism does not currently exist. Of the seventeen programs listed in the Obey-Porter legislation or the twenty-four programs listed in the ECS review, for example, only five have benefited in any significant way from federal R&D funding. Direct Instruction and ALEM (an earlier form of Community for Learning) benefited from Follow Through funding long ago, Onward to Excellence and Community for Learning have been developed in federally-funded regional laboratories, and Success for All and the Talent Development High School were developed in a federally-funded research center (but since its inception Success for All has depended far more on private foundation funding than on federal funding). All of the other programs exist primarily because of private foundation funding; eight comprehensive designs

exist because of New American Schools funding, which is no longer supporting development of new programs. Clearly, development and evaluation of new programs will not move forward at an adequate pace without a significant federal investment. New American Schools spent about $120 million over five years to develop eight comprehensive designs. Using this as a benchmark, the resources needed to develop and evaluate additional designs will be substantially greater than the $12 million recently allocated for this purpose by Congress.

As Title I changes to focus on research-based practices, a substantially greater investment in R&D will be needed. Funds will be needed to develop new comprehensive designs for elementary and secondary schools, as noted above. However, there are many other problems in need of R&D. For example, there is a need for research on programs in specific subject areas, such as reading and mathematics. In addition to development of basic instructional strategies, there is a need for research on specific strategies for children who have fallen behind, such as reading programs for secondary students who are performing far below grade level. There is a strong need to develop and evaluate effective bilingual and English as a Second Language (ESL) programs for the rapidly increasing population of children who enter school with limited English proficiency. Effective early childhood programs capable of helping disadvantaged children enter school ready to learn are needed; effective early childhood programs for English language learners are particularly lacking. Programs to reduce dropouts, to increase college-going among talented students from disadvantaged families, and to facilitate successful school-to-work transitions are desperately needed.

It is not only academic instructional programs that are needed for Title I schools. There is a need for effective means of involving parents and communities in support of children's learning, of integrating health, mental health, and social services with education, and of dealing with such problems as truancy, behavior difficulties, and drug abuse. This does not mean that

substantial Title I funds should be used for health or mental health services, but that Title I schools should have the capacity to help parents access services provided by other agencies. Effective programs for classroom management, school climate, and grouping are also needed.

Programs in most of these areas already exist, but most lack adequate evaluations in comparison to control groups by their developers, much less by independent evaluators. Even those that have been well evaluated may lack capacity to work at scale. Setting up mechanisms for third-party evaluations and scale-up is also essential.

Beyond the need for specific replicable programs, there is a great deal of research needed on factors that underlie effective practice in a variety of areas. For example, what are effective uses of paraprofessionals? What types of professional development work best? How can preservice and induction programs be able to contribute to improving teachers' skills and knowledge? What kinds of grouping and school organization strategies are most effective at different grade levels? How can transitions from home to school, elementary to middle school, and middle to high school be made likely to work well? What are effective approaches for children who speak languages other than English? What are effective after-school and summer school approaches? What local organizational structures best support initial implementation and eventual institutionalization of research-proven reforms?

Practical research and development of the kind that directly informs practice in Title I schools has been so rare and so poorly funded that an enormous job remains to be done in order to produce both effective programs and convincing answers to key questions posed by educators. What is needed is a substantial increase in research specifically focused on identifying effective practices in Title I schools. Approximately three percent of Title I funds should be added to the program to fund R&D on improving instruction and outcomes in Title I schools. At present, this would be approximately $240 million per year, a vast increase over current expenditures for

R&D in all of education but a tiny portion of Title I. The need for this seems self-evident; how could it be argued that three percent of Title I should be not be used to find how to make the remaining ninety-seven percent maximally effective? Obviously, most of whatever is discovered in research on Title I schools will also benefit non-Title I schools, so the $240 million proposed here should really be seen as an infinitesimal proportion of all federal and non-federal education expenses. Yet it could be the most important portion of all.

The research and development that would be necessary to support moving Title I toward proven programs are clearly a federal responsibility, and will need federal funding. However, this function might best be managed by a semi-independent agency, perhaps on the model of the Corporation for Public Broadcasting, NIH, or the Smithsonian. Educators and policy makers will need assurance that the R&D process is independent of current partisan politics or Department of Education policies. An entrepreneurial, flexible agency will be needed to aggressively seek out and promote promising practices, subject them to rigorous evaluation, and terminate work on programs that fail to produce desired outcomes or significant capacity for replication. Existing federal agencies might have oversight of a R&D entity of this kind, but they are poorly placed to have the flexibility, capacity, or independence necessary to accomplish this essential task.

Accountability and Assessment

Facilitating widespread adoption of proven programs will not solve all of the problems of Title I schools. There are several additional issues that should also be addressed in reauthorizing Title I.

One of these has to do with accountability. As noted earlier, changes in accountability were a major focus of the1994 reauthorization, but many of the changes contemplated in the

legislation were not implemented in practice (Citizen's Commission on Civil Rights, 1998). Recent studies find that implementation of standards and accountability mechanisms have relatively little impact on how teachers teach (e.g., Goertz, Floden, O'Day, 1996; Newmann, King, & Rigdon, 1997; Cohen & Hill, 1997). Still, standards and assessments do affect school and district policies, and for this reason it is essential that they be well-formulated, fair, widely accepted, and most importantly that accountability mechanisms based on them reward the right behaviors (and discourage counterproductive practices or policies). A few principles of effective uses of standards and assessments for Title I schools are as follows. (Note: Many of these are already in the Title I legislation but are not consistently implemented.)

1. *Assessments Used In State Accountability Programs Should Be Unbiased.* This should go without saying, but there are still areas in which assessments are biased, particularly against students who are speakers of languages other than English.
2. *Assessments Should Be So Broad And Worthwhile That They Are Worth Teaching To.* It is clear that teachers do "teach to the test" and that school and district policies, especially in high-poverty schools, may be influenced by what is tested. (For example, subjects such as creative writing, social studies, and science may be taught more in districts that assess these subjects.) Increasing breadth of assessment without having children sitting taking tests for weeks usually requires matrix sampling (testing each student on a different portion of the test.). But this can cause political difficulties because matrix sampling does not typically produce individual student scores. Increasingly, states are testing in every major subject in certain years, such as 4 and 8 or 3, 5, and 8. A better solution might be to test some subjects (such as reading and math) every year, and test other topics in different years. For example, if reading and math were assessed in every grade, writing in grades three and six, social

studies in four and seven, and science in five and eight, and so on, the tests could remain manageable and still produce reliable student and school scores. Introducing the first reading test in first or second grade is particularly important to reward investment in early childhood and early reading interventions. These early grades tests should be given one-on-one by trained testers.

3. *Accountability Procedures Should Discourage Dysfunctional Strategies.* Schools and districts under accountability pressure may adopt strategies that artificially inflate scores without improving learning. Examples include increasing retention rates (so that students are older when they take the tests); defining more students as learning disabled or limited English proficient, if these students are excluded from testing; failing to obtain makeup tests from absent low achievers; and teaching narrowly to a narrow test. All of these can be guarded against (see, for example, Slavin & Madden, 1991), but states and districts must be vigilant to ensure that high-stakes testing is not producing counterproductive policies or practices.
4. *Accountability Procedures Should Reward Growth.* Knowing the substantial correlation between average student socioeconomic status and average student achievement, it is essential to avoid punishing schools for serving impoverished neighborhoods. This means that growth, not only levels of performance, should be the criterion for success in school accountability.
5. *Test Scores Should be Reported by Subgroup.* A school could not be considered successful if it is failing with particular socioeconomic or ethnic subgroups. Schools should be required to disaggregate their data to show gains for all groups.
6. *Sanctions, Up to But Rarely Including Reconstitution, Should Be Applied To Schools that Are Persistently Low and Declining.* Accountability means little if it does not

have consequences. Schools that are doing a very poor job over time cannot be allowed to continue doing so. In general, the embarrassment inherent in being identified as a low-performing school is enough of a sanction to motivate change. Schools whose students are performing at low and declining levels should be offered professional development, invited to adopt proven programs, and given additional resources to help to help improve their outcomes (see Lemann, 1998; Slavin, 1998). However, if these measures are not effective, some combination of mandating a more rigorous educational program and the transfer or firing of principals or other staff may be necessary. Total reconstitution is rarely necessary and causes its own problems (having to do with the difficulty of hiring and training a whole new staff), but may occasionally be justifiable to put an end to persistently dysfunctional situations.

Schoolwide Projects

Schoolwide projects are schools in which Title I resources can be used to benefit all children, not just those with the lowest test scores (as in non-schoolwide, "targeted assistance" schools). Schoolwide projects were possible but difficult to implement before the 1994 reauthorization, but since that time have become progressively easier to implement. As noted earlier, at present schoolwide projects are limited to schools in which at least 50% of students qualify for free or reduced price lunches.

Are schoolwide projects more effective than targeted assistance schools? There have been few head-to-head comparisons, and it is obviously important what programs are being implemented in each type of school (Wong & Meyer, 1998). However, there is much indirect evidence that favors schoolwide strategies. First, there is evidence from a reanalysis of

Prospects data that indicates significantly higher achievement in schools with a well-integrated, coordinated approach to curriculum, instruction, and remedial services (D'Agostino, Borman, Hedges, & Wong, 1998). This degree of school-level coordination is possible in targeted assistance schools, but is obviously much easier in schoolwide projects. Second, most examples of replicable Title I programs that have produced markedly improved student outcomes are inherently schoolwide projects. For example, the Special Strategies study (Stringfield et al., 1997) examined a variety of reputationally outstanding programs used in Title I schools. Those that produced the greatest achievement gains were our Success for All program (Slavin et al., 1996), and James Comer's School Development Program (Comer, Haynes, Joyner, & Ben-Avie, 1996). It is important to note, however, that not all schoolwide programs studied by Stringfield et al. (1997) were successful in increasing achievement; students in locally-developed (though still reputationally outstanding) schoolwide projects performed no better than controls, as did students in two other national programs. A separate study that compared Success for All to locally developed schoolwide projects also found that it was the nature of the schoolwide program implemented, not schoolwide vs. targeted assistance status, that made the difference in student achievement (Ross, Alberg, & Nunnery, 1998).

Evidence from a variety of sources would support the idea that schoolwide projects have greater potential for positive effects than non-schoolwide strategies, but this potential may or may not be realized, depending on the specific programs implemented. For example, many schoolwide projects continue to use Title I resources for remedial pullouts, classroom aides, and other traditional uses that have long been characteristic of non-schoolwide Title I programs (Puma et al., 1997). Others use schoolwide status to make modest reductions in class size, a politically popular choice but one unlikely to make a profound difference in achievement (see Slavin, 1994). Some take schoolwide status as a license to purchase anything at all, from

janitorial supplies to playground equipment, expenditures that are clearly contrary to the law but occur nonetheless.

Still, there are few obvious drawbacks to schoolwide projects. There is nothing a targeted assistance school can do that a schoolwide project cannot; targeted assistance status is only beneficial, if at all, in keeping the school from simply absorbing Title I funds into its general operating budget, or trying to spread out services so broadly that they benefit no one. Yet the track record of both remedial pullouts and use of classroom aides is so weak (see Slavin, 1994) that there is little rationale for using federal regulations to largely restrict moderate-poverty schools to these uses. Further, due in part to widespread (and growing) residential segregation and the decline of bussing for racial integration, it is usually the case that students who receive services in targeted assistance schools are not very different in poverty background than those who do not (Kennedy, Jung, & Orland, 1986; U.S. Department of Education, 1993b). All of this argues for further expanding access to the schoolwide option. To ensure that schools are moving to schoolwide status for the right reasons, those with free lunch proportions less than 50% might be required to submit plans showing how schoolwide status will be used to improve teaching and learning, in particular to adopt proven programs and practices. Actually, a form of this policy already exists; school districts can request waivers to implement schoolwide projects in schools that do not meet the 50% poverty requirement. However, for schools with clear plans to use Title I dollars schoolwide to improve instructional outcomes, schoolwide status should be encouraged. Along with encouragement to use these resources for professional development, adoption of proven programs and practices, and other means of improving instruction and curriculum in the entire school, the freedom to use Title I resources to implement proven programs in the whole school is likely to produce greater learning by larger numbers of disadvantaged, at-risk children than investment in remedial resources. In fact, schoolwide

projects may be particularly beneficial for moderate-poverty schools that receive relatively small Title I allocations. For example, $20,000 buys either one aide or an extraordinary professional development program for the whole school. About $50,000 buys either one pull-out teacher or enables the school to adopt a proven reading or math approach and implement it with high quality. The potential for positive impact seem much greater for the strategies that help all teachers do a better job of teaching all students all day, but if a school staff in a schoolwide project believes that the teacher or the aide is a better investment, they should still be able to make this choice.

Professional Development

The 1994 reauthorization of Title I also emphasized, at least at the rhetorical level, investment of Title I resources in high-quality professional development for all teachers in Title I schools (not just Title I teachers). It is unclear how much this provision caused schools to increase professional development, or what the quality or impact of Title I-supported professional development has been. Leaving aside the professional development that is central to all comprehensive reform models, routine professional development often ends up being workshops on generic topics (e.g., multicultural education, multiple intelligences, or cooperative learning) with little classroom followup, few materials coordinated with the inservice, and few expectations that teachers will actually change their practices as a result of the inservice. Much inservice, especially coursework provided by universities or teacher development centers, takes individual teachers out of their school contexts and then expects them to return to their school and somehow implement what they have learned by themselves, with little if any internal or external support. Often, the inservice provided to teachers is on topics that the teachers did not ask for, that do not meet their needs, interests, or contexts. As a result of these and many other

problems, professional development only rarely has a discernable and lasting impact on teachers' behavior or student outcomes (Orlich et al., 1993).

This is not to say that general professional development cannot have beneficial impacts, and well-designed professional development programs must be part of any plausible plan to improve the outcomes of Title I. For example, traditional types of professional development can be useful in building teachers' subject matter knowledge or understanding of general pedagogical principles, and teacher-by-teacher inservices with extensive followup can help teachers develop generic skills, such as classroom management methods, cooperative learning strategies, or means of including students with disabilities. However, to make a more profound and widespread difference in student achievement, more comprehensive and schoolwide professional development strategies, such as those typical of comprehensive reform models, are likely to be needed.

Professional development, both as part of program adoption and as a separate investment in improving teachers' skills and knowledge, should become an essential focus of Title I. The Commission on Chapter I (1992) recommended a set-aside of twenty percent of Title I funds for professional development, one among many of the Commission's recommendations that was not adopted by Congress. Whether or not a percentage is specified, Title I needs to continually promote the idea that quality professional development is a favored investment of Title I funds. However, uses of professional development funds should be focused on programs that have the following characteristics.

1. *The Practices or Information Introduced in Professional Development Programs Should Be Based on Rigorous Research.* Ideally, this means that there should be evidence that students of teachers trained in a given method or those who use given materials achieve significantly better than similar students in a control group using

typical methods or materials. At a minimum, the methods or materials should be based on the best available evidence of what works (even if there is no definite evidence that a particular training program that incorporates effective principles produces enhanced outcomes).

2. *Effective Professional Development Involves Extensive Followup.* Someone, be they program experts, coaches, or peer coaches, needs to observe teachers implementing new methods and give them feedback on their implementation and ideas for improving it (see Showers, Joyce, & Bennett, 1987). Even the very best of training usually fails to transfer to classroom practice unless teachers are given assistance in making this transfer for their own classrooms.
3. *Professional Development Should Be Given to All Staff in a School or to a Recognizable Subgroup Within the School* (such as the math department or all kindergarten teachers). It is difficult for a teacher to go alone to an inservice, no matter how good, and then return to the classroom and implement new methods. Training is much more likely to transfer to practice and be sustained over time if teachers take on a given method as a group, preferably as an entire school.
4. *Adequate Time Is Needed for Training, Coaching, and Discussion.* One of the biggest difficulties in providing quality professional development is finding enough time to do it (Purnell & Hill, 1992). Teachers often don't like coming in on vacation days (even if they are paid), and administrators and parents don't like sending children home or replacing teachers with large numbers of substitutes. Building significant numbers of days for professional development into the school schedule, both before school opening and during the school year, is the best solution, and can be paid for with Title I funds, but may still be politically difficult.

5. *Teachers Need to Choose Their Inservices as a Team.* Teachers, like other professionals, are unlikely to put energy, enthusiasm, and creativity into any program that they feel was imposed upon them. Teachers and other educators should have opportunities to review a variety of options for improving student outcomes, visit schools using promising programs, examine materials, view video tapes, and then make unpressured choices among effective alternatives (Showers et al., 1987).
6. *Outcomes of Professional Development Should Be Assessed.* At a bare minimum, it is essential to include in a professional development plan some means of determining if implementation has taken place and is of high quality. Providers of professional development services should make available implementation benchmarks or observation checklists to help principals, district officials, and the teachers themselves know whether or not a given program or practice is being implemented as intended. Followup visits by professional developers and/or schools or district experts should use these implementation benchmarks to inform school staffs where they stand in terms of implementation and how they can improve, and to hold professional developers themselves accountable. Ideally, student achievement should also be monitored and reported as the ultimate indicator of the effectiveness of a given inservice program. Of course, routinely administered state or local assessments are likely to provide this information, but only on an infrequent basis; curriculum-based measures more closely tied to the material being taught and given every few weeks or months are far more timely and useful as indicators of the impact of professional development services.

Maintain Direct Services to Children

The foregoing discussion is not intended to imply that all or even the majority of Title I funds should go into professional development or other expenses of adopting proven programs. Instead, most Title I funds should go into school-based personnel, as they do now. However, the functions of these personnel should change in line with the requirements of proven programs and in line with research on effective practices. For example, there is evidence to support changing paraprofessionals' roles away from serving as classroom aides and toward providing one-to-one tutoring to children who are struggling in reading or math (Slavin, 1994; Wasik & Slavin, 1993). There is evidence to support the need for early intervention, such as providing high-quality preschool programs for three- and four-year-olds, followed up by effective instruction in the early elementary school years (Karweit, 1994; Reynolds 1998). In upper elementary, middle, and high schools, Title I staff can provide targeted remedial services, tutoring, study skills instruction, and dropout prevention assistance (Fashola & Slavin, 1998). All comprehensive reform models have specific staffing requirements; for example, most require a full-time facilitator or coordinator in each school. Many require tutors, family support staff, additional teachers for various purposes, computer coordinators, and so on.

One area in which an expansion of direct services may be needed is for after-school and summer school programs. Of course, Congress has already allocated substantial resources to after-school programs, through the 21st Century Learning Communities Program, and President Clinton has recently proposed further increases in that initiative. A national movement away from social promotion, also advocated by the Clinton Administration, is greatly increasing the need for after-school and summer school programs, as an alternative to massive retentions. However, any expansion of after-school and summer school programs should be based on research on effective strategies. At present, there is very little research on after-school programs, and few replicable models (see Fashola, 1998). Even less is known about effective summer

school programs. In a climate in which large numbers of children may have to repeat a grade because they attended an ineffective after-school or summer school program, developing and evaluating replicable models is essential.

Policy Imperatives

Title I needs a substantial refocusing if it is to have a significantly greater impact on the education of students placed at risk of school failure. Some of the policy imperatives that flow from the issues discussed in this chapter are as follows.

1. Add guidance to states, districts, and individual schools encouraging schools to adopt proven programs.
2. Provide grants to Title I schools, especially schoolwide projects, to help with start-up costs of adopting proven, comprehensive programs and to serve as an incentive for schools to adopt these programs. Increase the availability of these grants in line with the growing national capacity of organizations providing proven designs.
3. Increase the number, quality, and capacity of proven programs. Hold design competitions to fund the creation of new designs capable of working in Title I schools, commission rigorous third-party evaluations of existing and new designs, and provide funding to non-profit organizations that develop and disseminate proven programs to help them improve their programs and build capacity for dissemination. Research and development of programs and practices for Title I schools should be greatly improved and funded at a level set at approximately three percent of all Title I funding.
4. Improve assessment and accountability procedures for Title I schools to reward schools making gains toward demanding standards, assist schools that are not making

adequate gains, and restructure schools that are low and declining. Ensure that assessment/accountability procedures do not reward retention, special education placements, narrow teaching or other counterproductive policies.

5. Further expand opportunities for schools to become schoolwide projects, especially as comprehensive reform designs become increasingly available.
6. Increase investment in high-quality professional development, even beyond adoption of comprehensive designs. Set standards for effective professional development emphasizing teacher choice, classroom followup and coaching, whole-school focus, and assessment of implementation and outcomes.

Conclusion

Title I can be much more than it is today. While the majority of Title I funding should continue to support essential professional and paraprofessional staff in high-poverty schools, both existing and new Title I funds should increasingly support schools in adopting effective instructional programs and improving professional development. Children in Title I schools need six hours or more of high-quality instruction every day, not forty minutes of remediation. It is time that Title I became the engine of reform in high-poverty schools, helping them adopt programs based on the best research, development, and dissemination practices available. Developments in recent years have made possible a new vision of what Title I can be; all that remains is for us to embrace that vision, and then make it a reality.

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